



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0638; Directorate Identifier 2017-CE-018-AD]

RIN 2120-AA64

Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Diamond Aircraft Industries GmbH Models DA 42, DA 42 M-NG, and DA 42 NG airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as crack formation on the flap bell crank, which could cause the flap bell crank to fail. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamondaircraft.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0638; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0638; Directorate Identifier 2017-CE-018-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory,

economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2017-0074, dated April 28, 2017 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Cracks and deformation have been found on the flap bell crank Part Number (P/N) D60-2757-11-00. Frequent high load conditions have been identified as the root cause.

This condition, if not detected and corrected, could lead to failure of the flap bell crank and consequent reduced control of the aeroplane.

To address this potential unsafe condition, Diamond Aircraft Industries (DAI) issued Mandatory Service Bulletin (MSB) 42-126 / MSB 42NG-066 and the corresponding Work Instruction (WI) MSB 42-126 / WI-MSB 42NG-066 (single document), hereafter referred to as ‘the applicable MSB’ in this [EASA] AD, providing inspection and modification instructions.

For the reason described above, this [EASA] AD requires modification of the flap control system by installing two spacers to replace a single long spacer, repetitive inspections of the flap bell crank, and, depending on findings, replacement of the flap bell crank with an improved part. Installation of an improved flap bell crank constitutes terminating action for the repetitive inspections required by this [EASA] AD.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0638.

Related Service Information under 1 CFR part 51

Diamond Aircraft Industries GmbH has issued Mandatory Service Bulletin MSB 42-126 MSB / 42NG-066, dated March 27, 2017 (single document), and Work Instruction WI-MSB 42-126 / WI-MSB 42NG-066, dated March 27, 2017 (single document). In combination, this service information describes procedures for repetitively inspecting the flap bell crank for cracks, replacing the flap bell crank if cracks are found, and modification of the flap control system. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 190 products of U.S. registry. We also estimate that it would take about 4 work-hours per product to comply with the initial inspection requirement of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the initial inspection requirement of this proposed AD on U.S. operators to be \$64,000, or \$340 per product.

We also estimate that it would take about 2 work-hours per product to comply with the repetitive inspection requirement of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the repetitive inspection requirement of this proposed AD on U.S. operators to be \$32,300, or \$170 per product.

In addition, we estimate that any necessary replacement action would take about 1 work-hour and require parts costing \$430, for a cost of \$515 per product. We have no way of determining the number of products that may need these actions.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new AD:

Diamond Aircraft Industries GmbH: Docket No. FAA-2017-0638; Directorate Identifier 2017-CE-018-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Diamond Aircraft Industries GmbH Model DA 42, DA 42 M-NG, and DA 42 NG airplanes, serial numbers 42.004 through 42.427, 42.AC001 through 42.AC151, 42.M001 through 42.M026, 42.N001 through 42.N067, 42.N100 through 42.N129, 42.NC001 through 42.NC008, and 42.MN001 through 42.MN033, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 27: Flight Controls.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as crack formation on the flap bell crank. We are issuing this AD to prevent failure of the flap bell crank, which could result in reduced control.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Inspect the flap bell crank, part number (P/N) D60-2757-11-00, and modify the flap control system by installing two spacers, P/N DS BU2-10-06-0065-C, where the flap actuator rod end bearing is connected to the flap bell crank, following the Instructions section in Diamond Aircraft Industries GmbH (DAI) Work Instruction WI-MSB 42-126 / WI-MSB 42NG-066, dated March 27, 2017 (single document), as specified in DAI Mandatory Service Bulletin MSB 42-126 / MSB 42NG-066, dated March 27, 2017 (single document), at whichever of the following compliance times occurs later:

(i) Before exceeding 600 hours time-in-service (TIS), and repetitively thereafter at intervals not to exceed 200 hours TIS.

(ii) Within the next 100 hours TIS after the effective date of this AD or within the next 6 months after the effective date of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 200 hours TIS.

(2) If any discrepancies are found during any inspection required in paragraph (f)(1) of this AD, before further flight, replace the flap bell crank with an improved part, P/N D60-2757-11-00_01, following the Instructions section in DAI Work Instruction WI-MSB 42-126 / WI-MSB 42NG-066, dated March 27, 2017 (single document), as specified in DAI Mandatory Service Bulletin MSB 42-126 / MSB 42NG-066, dated March 27, 2017 (single document). Installing P/N D60-2757-11-00_01 terminates the repetitive inspections required in paragraph (f)(1) of this AD. This installation as terminating action may be done in lieu of the inspections required in paragraph (f)(1) of this AD.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product*: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2017-0074, dated April 28, 2017. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0638. For service information related to this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamondaircraft.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. Issued in Kansas City, Missouri, on June 19, 2017.

Pat Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.